

is a distinct intermediate entopectoral slip between the caudal border of the pectoralis minor and the cephalic margin of the abdominal pectoral. The deltoid is attached along clavicle ventrad to the sternoclavicular articulation.

In the sacred monkey (*Semnopithecus Entellus*) the pectoralis minor has shifted further laterad to side of sternum and some attachment to the costal cartilages, and has also moved somewhat cephalad. The abdominal pectoral is present. The axillary arch is more adherent to the latissimus dorsi and all three are inserted higher up on the humerus. In the black-backed Macaques monkey (*Macacus melanotus*) the axillary arch is more adherent to the latissimus and otherwise characters as in the sacred monkey, but less marked.

In the baboons there is a complete differentiation of the pectoralis major and minor, and there is a wide interval between the latter and the abdominal pectoral. The pectoralis minor is inserted higher up on the humerus.

In the orang (*Simia satyrus*), as a representative of the anthropoid apes, the pectoralis major has shifted laterad to costal cartilages and edge of sternum. The abdominal pectoral has united to the major, except near insertion. There is a clavicular portion to the major. The three elements are separate at insertion into humerus and show the origin of twisting of the pectoralis major tendon in man. The pectoralis minor has shifted to the costal cartilages and at insertion has gained the coracoid process of the scapula. The subclavius has also shifted laterad to the costal cartilage of the first rib. No panniculus is evident, and there is a complete disappearance of it except as an individual variation in man and the anthropoid apes.

It will be observed that in the quadrupedal primates there is no clavicular division of the pectoralis major and that this muscle is attached to the mid-line of the sternum, and that the pectoralis minor is also attached wholly to the sternum, and the less differentiated condition of the two pectoral layers and the pannicular characters should be carefully noted. The characters presented by the lemur and marmoset are of the primary type.

In the lower monkeys the characters constitute an intermediate or transitional type, and will be observed in the tendency to shift laterad of the pectoral layers on sternum to costal cartilages and also of a shifting cephalad along humerus of the pectoralis minor, the well developed axillary arch and tendency to abort by union with latissimus in the higher forms of the present type. In the baboon the pectorals are well differentiated, and a wide interval between pectoralis minor and abdominal pectoral. In the highest or secondary type the pectoralis minor has gained a clavicular portion by a shifting ventrad along clavicle of a portion of deltoid, as indicated by it occasionally being supplied by the circumflex nerve. The abdominal pectoral has united with the costo-sternum pectoral, the latter being the true pectoralis major. The pectoralis minor has origin from costal cartilages and insertion into coracoid process of scapula. The axillary arch is obsolete except as a variatum or as a rudiment in floor of axilla as a partial boundary to the foramen of Landers.

The abnormal muscles (in pectoralis minimus and costo-coracoideus) in man can be readily explained as persistent parts of the panniculus plane, and are but atavistic reversions to a phylogenetic structural condition, such conditions being normal to allied species.

The resumé was illustrated by charts, blackboard drawings, microscopical sections and dissections.

The works of Hartman, Bischoff, Huxley, Heisler, McMunich, Minot and Geo. Huntington in *Journal of Anatomy* were drawn upon and some original work.

PUBLICATIONS.

International Clinics. Fifteenth Series, Vol. II.—Philadelphia, the J. B. Lippincott Company.

The present volume of this series is up to the usual standard, and contains the following papers:

Treatment. The Treatment of Nephritis in Childhood, by John Lovett Morse; the Therapeutic Indications of Kephir, by G. Hayem; Some Observations on the Treatment of Pulmonary Hemorrhage by Adrenalin Chlorid, by D. Barty King; Suggestions Regarding the Treatment of Neurasthenia, by Robert T. Edes; X-Ray Treatment of Tinea Tonsurans, by Sabouraud and Noire.

Medicine. Diagnosis of Incipient Thoracic Tuberculosis, by Robert N. Wilson; Uremic Psychosis, Multiple Gastric Ulceration and Diabetes Mellitus, by Solomon Solis Cohen; Galloping Typhoid, by H. Roger; Plague, by J. R. Williamson; Seasickness, by A. L. Benedict.

Surgery. Pathology and Treatment of the Hernias of Children, by Edred M. Corner; Injuries of the Prostate Gland, by G. Frank Lydston; Enlargements of the Testis and Epididymis, by Daniel N. Eisendrath; Acute Purulent Generalized Meningitis, by Lermoyez and Bellin; Intracapsular Fractures and Dislocations at the Hip Joint, by Thos. H. Manly; Traumatism as an Etiologic Factor in Infectious Diseases of the Bones and Joints, by Charles Green Cumston; Sarcoma of the Gluteal Region, by J. Garland Sherrill; Use of Scopolamin as a General Anesthetic in Surgery, by Felix Terrier.

Gynecology. Rational Therapy of Uterine Displacements, by Chauncey D. Palmer.

Ophthalmology. Clinical Significance of Exophthalmos, by Mary Buchanan.

Rhinology. Suppurative Diseases of the Accessory Sinuses of the Nose, by Norval H. Pierce.

Physiology. Ehrlich's Side-Chain Theory in Its Application to the Physiology of Digestion, by J. C. Hemmeter.

Pathology. Chromaffin System, with Special Reference to Addison's Disease and Status Thymicus, by Josef Wiesel.

A Hand-Book of Nursing.—Revised edition. Published under the direction of the Connecticut Training School for Nurses. Philadelphia, J. B. Lippincott Company.

This work was originally issued in 1878, and since that time it has passed through several editions and revisions. It is the work commonly known as the "Connecticut Hand-Book of Nursing." The present edition seems to have been considerably revised.

Chloride of Zinc as a Deodorant, Antiseptic and Germicide.—By T. B. McCLINTIC. Bulletin No. 22, U. S. P. H. and M. H. Service.

The conclusion of the monograph is that "Zinc chloride has some properties as a deodorant to recommend it favorably, but its antiseptic and germicidal powers are comparatively feeble, which, with its cost and caustic properties, practically eliminate it from the useful and reliable disinfectants."

University of California Publications.—Physiology. Vol. 2, No. 17. On the Influence of Electrolytes upon the Toxicity of Alkaloids. (Preliminary Communication).—By BRAILSFORD ROBERTSON.

Vol. 3, No. 1, On Chemical Methods by which the Eggs of a Mollusc (*Lottia Gigantea*) Can Be Caused to Become Mature.—By JACQUES LOEB.

Transactions of the 13th Annual Meeting of the Hawaiian Territorial Medical Society, Honolulu, Nov., 1904.

Physicians' Pocket Account Book.—By J. J. TAYLOR, M. D. Published by the Medical Council, Philadelphia.

The Work of the Interstate Commerce Commission. By H. T. NEWCOMB.